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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: E. Marlowe Goble et al.  
Serial No.: 10/687,865  
Filing Date: 10/17/2003  
For: FACET JOINT REPLACEMENT  
Group Art Unit: 3738  
Examiner: Unknown  
Attorney's Docket No.: MED-1 CON CIP

Mail Stop Amendment  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR 1.56, 1.97 and 1.98, Applicants hereby make the following documents of record in the above-identified application:

U.S. Patents

- (1) U.S. Patent No. 6,579,319, issued 06/17/03 to Goble et al.
- (2) U.S. Patent No. 6,540,785, issued 04/01/03 to Gill et al.
- (3) U.S. Patent No. 6,540,747, issued 04/01/03 to Marino
- (4) U.S. Patent No. 6,485,518, issued 11/26/02 to Cornwall et al.
- (5) U.S. Patent No. 6,458,131, issued 10/01/02 to Ray
- (5) U.S. Patent No. 6,451,019, issued 09/17/02 to Zucherman et al.
- (6) U.S. Patent No. 6,419,703, issued 07/16/02 to Fallin et al.
- (7) U.S. Patent No. 6,402,750, issued 06/11/02 to Atkinson et al.
- (8) U.S. Patent No. 6,332,883, issued 12/25/01 to Zucherman et al.
- (9) U.S. Patent No. 6,235,030, issued 05/22/01 to Zucherman et al.
- (10) U.S. Patent No. 6,228,118, issued 05/08/01 to Gordon
- (11) U.S. Patent No. 6,190,387, issued 02/20/01 to Zucherman et al.
- (12) U.S. Patent No. 6,183,471, issued 02/06/01 to Zucherman et al.
- (13) U.S. Patent No. 6,156,067, issued 12/05/00 to Bryan et al.
- (14) U.S. Patent No. 6,146,421, issued 11/14/00 to Gordon et al.
- (15) U.S. Patent No. 6,093,205, issued 07/25/00 to McLeod et al.
- (16) U.S. Patent No. 6,068,630, issued 05/30/00 to Zucherman et al.
- (17) U.S. Patent No. 5,951,555, issued 09/14/99 to Rehak et al.
- (18) U.S. Patent No. 5,916,267, issued 06/29/99 to Tienboon
- (19) U.S. Patent No. 5,888,223, issued 03/30/99 to Bray, Jr.

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- (20) U.S. Patent No. 5,755,796, issued 05/26/98 to Ibo et al.
- (21) U.S. Patent No. 5,728,097, issued 03/17/98 to Mathews
- (22) U.S. Patent No. 5,725,582, issued 03/10/98 to Bevan et al.
- (23) U.S. Patent No. 5,713,900, issued 02/03/98 to Benzel et al.
- (24) U.S. Patent No. 5,702,453, issued 12/30/97 to Rabbe et al.
- (25) U.S. Patent No. 5,702,392, issued 12/30/97 to Wu et al.
- (26) U.S. Patent No. 5,645,599, issued 07/08/97 to Samani
- (27) U.S. Patent No. 5,609,634, issued 03/11/97 to Voydeville
- (28) U.S. Patent No. 5,545,166, issued 08/13/96 to Howland
- (29) U.S. Patent No. 5,540,688, issued 07/30/96 to Navas
- (30) U.S. Patent No. 5,534,031, issued 07/09/96 to Matsuzaki et al.
- (31) U.S. Patent No. 5,496,318, issued 03/05/96 to Howland et al.
- (32) U.S. Patent No. 5,458,641, issued 10/17/95 to Ramirez Jimenez
- (33) U.S. Patent No. 5,456,722, issued 10/10/95 to McLeod et al.
- (34) U.S. Patent No. 5,375,823, issued 12/27/94 to Navas
- (35) U.S. Patent No. 5,360,430, issued 11/01/94 to Lin
- (36) U.S. Patent No. 5,318,567, issued 06/07/94 to Vichard
- (37) U.S. Patent No. 5,304,178, issued 04/19/94 to Stahurski
- (38) U.S. Patent No. 5,236,460, issued 08/17/93 to Barber
- (39) U.S. Patent No. 5,180,393, issued 01/19/93 to Commarmond
- (40) U.S. Patent No. 5,171,279, issued 12/15/92 to Mathews
- (41) U.S. Patent No. 5,129,900, issued 07/14/92 to Asher et al.
- (42) U.S. Patent No. 5,092,893, issued 03/03/92 to Smith
- (43) U.S. Patent No. 5,015,255, issued 05/14/91 to Kuslich
- (44) U.S. Patent No. 4,955,908, issued 09/11/90 to Frey et al.
- (45) U.S. Patent No. 4,892,545, issued 01/09/90 to Day et al.
- (46) U.S. Patent No. 4,743,260, issued 05/10/88 to Burton
- (47) U.S. Patent No. 4,653,481, issued 03/31/87 to Howland et al.
- (48) U.S. Patent No. 4,599,086, issued 07/08/86 to Doty
- (49) U.S. Patent No. 4,554,914, issued 11/26/85 to Kapp et al.
- (50) U.S. Patent No. 4,479,491, issued 10/30/84 to Martin
- (51) U.S. Patent No. 4,369,769, issued 01/25/83 to Edwards
- (52) U.S. Patent No. 4,003,376, issued 01/18/77 to McKay et al.
- (53) U.S. Patent No. 3,648,691, issued 03/14/72 to Lumb et al.
- (54) U.S. Patent No. 3,426,364, issued 02/11/69 to Lumb
- (55) U.S. Patent No. 2,677,369, issued 05/04/54 to Knowles
- (56) U.S. Patent No. 6,610,091, issued 08/26/03 to Reiley
- (57) U.S. Patent No. 3,867,728 issued 02/25/75 to Stubstad et al.
- (58) U.S. Patent No. 3,875,595 issued 04/08/75 to Froning
- (59) U.S. Patent No. 4,349,921 issued 09/21/82 to Kuntz
- (60) U.S. Patent No. 4,759,769 issued 07/26/88 to Hedman et al.
- (61) U.S. Patent No. 4,772,287 issued 09/20/88 to Ray et al.
- (62) U.S. Patent No. 4,863,477 issued 09/05/89 to Monson

- (63) U.S. Patent No. 4,904,260 issued 02/27/90 to Ray et al.
- (64) U.S. Patent No. 4,911,718 issued 03/27/90 to Lee et al.
- (65) U.S. Patent No. 5,047,055 issued 09/10/91 to Bao et al.
- (66) U.S. Patent No. 5,071,437 issued 12/10/91 to Steffee
- (67) U.S. Patent No. 5,147,404 issued 09/15/92 to Downey
- (68) U.S. Patent No. 5,171,280 issued 12/15/92 to Baumgartner
- (69) U.S. Patent No. 5,258,031 issued 11/02/93 to Salib et al.
- (70) U.S. Patent No. 5,306,308 issued 04/26/94 to Gross et al.
- (71) U.S. Patent No. 5,306,309 issued 04/26/94 to Wagner et al.
- (72) U.S. Patent No. 5,370,697 issued 12/06/94 to Baumgartner
- (73) U.S. Patent No. 5,458,642 issued 10/17/95 to Beer et al.
- (74) U.S. Patent No. 5,458,643 issued 10/17/95 to Oka et al.
- (75) U.S. Patent No. 5,437,672 issued 08/01/95 to Alleyne
- (76) U.S. Patent No. 5,514,180 issued 05/07/96 to Heggeness et al.
- (77) U.S. Patent No. 5,527,312 issued 06/18/96 to Ray
- (78) U.S. Patent No. 5,534,028 issued 07/09/96 to Bao et al.
- (79) U.S. Patent No. 5,534,030 issued 07/09/96 to Navarro et al.
- (80) U.S. Patent No. 5,545,229 issued 08/13/96 to Parsons et al.
- (81) U.S. Patent No. 5,556,431 issued 09/17/96 to Büttner-Janz
- (82) U.S. Patent No. 5,571,189 issued 11/05/96 to Kuslich
- (83) U.S. Patent No. 5,572,191 issued 11/05/96 to Lundberg
- (84) U.S. Patent No. 5,645,597 issued 07/08/97 to Krapiva
- (85) U.S. Patent No. 5,653,762 issued 08/05/97 to Pisharodi
- (86) U.S. Patent No. 5,674,295 issued 10/07/97 to Ray et al.
- (87) U.S. Patent No. 5,674,296 issued 10/07/97 to Bryan et al.
- (88) U.S. Patent No. 5,676,701 issued 10/14/97 to Yuan et al.
- (89) U.S. Patent No. 5,683,464 issued 11/04/97 to Wagner et al.
- (90) U.S. Patent No. 5,702,450 issued 12/30/97 to Bissierie
- (91) U.S. Patent No. 5,716,415 issued 02/10/98 to Steffee
- (92) U.S. Patent No. 5,824,093 issued 10/20/98 to Ray et al.
- (93) U.S. Patent No. 5,824,094 issued 10/20/98 to Serhan et al.
- (94) U.S. Patent No. 5,865,846 issued 02/02/99 to Bryan et al.
- (95) U.S. Patent No. 5,868,745 issued 02/09/99 to Alleyne
- (96) U.S. Patent No. 5,893,889 issued 04/13/99 to Harrington
- (97) U.S. Patent No. 6,001,130 issued 12/14/99 to Bryan et al.
- (98) U.S. Patent No. 6,014,588 issued 01/11/00 to Fitz
- (99) U.S. Patent No. 6,019,792 issued 02/01/00 to Cauthen
- (100) U.S. Patent No. 6,039,763 issued 03/21/00 to Shelokov
- (101) U.S. Patent No. 6,063,121 issued 05/16/00 to Xavier et al.
- (102) U.S. Patent No. 6,066,325 issued 05/23/00 to Wallace et al.
- (103) U.S. Patent No. 6,080,157 issued 06/27/00 to Cathro et al.
- (104) U.S. Patent No. 6,113,637 issued 09/05/00 to Gill et al.
- (105) U.S. Patent No. 6,132,464 issued 10/17/00 to Martin

- (106) U.S. Patent No. 6,132,465 issued 10/17/00 to Ray et al.
- (107) U.S. Patent No. Re. 36,758 issued 06/27/00 to Fitz
- (108) U.S. Patent No. 5,401,269 issued 03/28/95 to Büttner-Janz et al.
- (109) U.S. Patent No. 5,192,326 issued 03/09/93 to Bao et al.

#### Foreign Patents

- (110) PCT International Publication No. WO 00/62684 A1, by NUVASIVE, INC. published 10/26/00
- (111) PCT International Publication No. WO 01/97721 A2, by KYPHON INC. published 12/27/01
- (112) PCT International Publication No. WO 01/97721 A3, by KYPHON INC. published 12/27/01
- (113) PCT International Publication No. WO 02/89712 A1, by David Gerber et al. published 11/14/02
- (114) PCT International Publication No. WO 03/20143 A2, by SYNTHES published 03/13/03
- (115) PCT International Publication No. WO 95/05783 A1, by FAIRANT published 03/02/95
- (116) PCT International Publication No. WO 96/00049 A1, by FAIRANT published 01/04/96
- (117) PCT International Publication No. WO 98/56301 A1, by KYPHON, INC. published 12/17/98
- (118) PCT International Publication No. WO 99/05995 A1, by GORDON, MAYA, ROBERTS & THOMAS NUMBER 1 LLC published 02/11/99
- (119) PCT International Publication No. WO 99/60957 C2, by NUVASIVE, INC. published 12/02/99
- (120) PCT International Publication No. WO 99/65412 A1, by PIONEER LABORATORIES INC. published 12/23/99
- (121) Japanese Patent Application No. JP 10-179622 A2 published 07/98
- (122) PCT International Publication No. WO 00/38582 A1 published 07/06/00
- (123) PCT International Publication No. WO 98/48717 A1 published 11/05/98
- (124) PCT International Publication No. WO 99/23963 A1 published 05/20/99
- (125) PCT International Publication No. WO 01/30248 A1 published 05/03/01

#### Other Documents

- (126) U.S. Patent Application Publication No. US 2003/0040797 A1, by Fallin et al. published 02/27/03
- (127) U.S. Patent Application Publication No. US 2003/0028250 A1, by Reiley et al. published 02/06/03

- (128) U.S. Patent Application Publication No. US 2003/0004572 A1, by Goble et al. published 01/02/03
- (129) U.S. Patent Application Publication No. US 2002/0151895 A1, by Soboleski et al. published 10/17/02
- (130) U.S. Patent Application Publication No. US 2002/0123806 A1, by Reiley published 09/05/02
- (131) U.S. Patent Application Publication No. US 2002/0099384 A1, by Scribner et al. published 07/25/02
- (132) U.S. Patent Application Publication No. US 2002/0072800 A1, by Goble et al. published 06/13/02
- (133) U.S. Patent Application Publication No. US 2002/0065557 A1, by Goble et al. published 05/01/03
- (134) Goh JC, et al., "Influence of PLIF cage size on lumbar spine stability", Spine, 2000 Jan 25:1, Medline abstract - one page.
- (135) Head WC, "Wagner surface replacement arthroplasty of the hip. Analysis of fourteen failures in forty-one hips", J Bone Joint Surg [Am], 1981 Mar 63:3, Medline abstract - one page.
- (136) Khoo LT, et al., "A Biomechanical Analysis of the Effects of Lumbar Fusion on the Adjacent Vertebral Motion Segment", Proceedings of the 2000 Annual Meeting of the North American Spine Society, New Orleans.
- (137) Kotani Y, et al., "The effects of spinal fixation and destabilization on the biomechanical and histologic properties of spinal ligaments. An in vivo study.", Spine, 1998 Mar 15 23:6, Medline abstract - one page.
- (138) Lemaire JP, et al., "Intervertebral Disc Prosthesis: Results and Prospects for the Year 2000", Clinical Orthopaedics and Related Research, Number 337, PP. 64-76.
- (139) Nagata H, et al., "The effects of immobilization of long segments of the spine on the adjacent and distal facet force and lumbrosacral motion", Spine, 1993 Dec. 18:16, pp. 2471-2479.
- (140) Nibu K, et al., "Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery [see comments]", J Spinal Discord, 1997 Aug 10:4, Medline abstract - one page.
- (141) Tsantrizos A, et al., "Segmental stability and compressive strength of posterior lumbar interbody fusion implants", Spine, 2000 Aug 1 25:15, Medline abstract - one page.
- (142) Reiley, M.A., U.S. Patent Publication No. US2002/0123806A1, September 5, 2002.

Copies of documents 1-56, 110-120 and 126-133, which are listed on the accompanying Form PTO-1449 (nine pages), are enclosed herewith. Copies of documents 57-109, 121-125, and 134-142, which are listed on the accompanying Form PTO-1449 (nine pages), were previously submitted to, or cited by, the Office in the parent U.S. Application Serial No. 09/726,169. Applicants respectfully request that  
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these documents be fully considered by the U.S. Patent and Trademark Office during the examination of this application and printed on any patent which may issue on this application. Applicants also respectfully request that a copy of Form PTO-1449 (nine pages), as considered and initialed by the Examiner, be returned to the undersigned with the next communication.

*This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No certification or fee is believed to be required.*

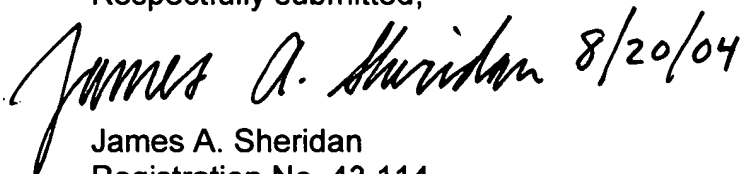
It is believed that this disclosure complies with the requirements of 37 CFR 1.56, 1.97 and 1.98. If for any reason the Examiner considers otherwise, it is respectfully requested that the undersigned be contacted by the Examiner by telephone in order that any deficiencies may be expeditiously remedied.

The enclosed documents may have markings thereon. Applicants are not presently aware of the source of those markings, and no significance is meant to be attached thereto.

Please charge any additional fees due in connection with this submission, or credit any overpayment, to Deposit Account No. 16-0221. A duplicate copy of this submission is enclosed for the convenience of the Examiner.

Thank you.

Respectfully submitted,

 8/20/04

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Registration No. 43,114  
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Waltham, MA 02154  
Tel. (781) 290-0060

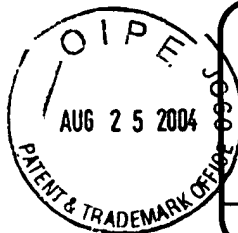
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>			<b>Application Number</b>	10/687,865
(use as many sheets as necessary)			<b>Filing Date</b>	10/17/2003
Sheet 1 of 9			<b>First Named Inventor</b>	E. Marlowe Goble et al.
			<b>Group Art Unit</b>	3738
			<b>Examiner Name</b>	Unknown
			<b>Attorney Docket Number</b>	MED-1 CON CIP

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		6,579,319		Goble et al.	06-17-2003	
		6,540,785		Gill et al.	04-01-2003	
		6,540,747		Marino	04-01-2003	
		6,485,518		Cornwall et al.	11-26-2002	
		6,458,131		Ray	10-01-2002	
		6,451,019		Zucherman et al.	09-17-2002	
		6,419,703		Fallin et al.	07-16-2002	
		6,402,750		Atkinson et al.	06-11-2002	
		6,332,883		Zucherman et al.	12-25-2001	
		6,235,030		Zucherman et al.	05-22-2001	
		6,228,118		Gordon	05-08-2001	
		6,190,387		Zucherman et al.	02-20-2001	
		6,183,471		Zucherman et al.	02-06-2001	
		6,156,067		Bryan et al.	12-05-2000	
		6,146,421		Gordon et al.	11-14-2000	
		6,093,205		McLeod et al.	07-25-2000	
		6,068,630		Zucherman et al.	05-30-2000	
		5,951,555		Rehak et al.	09-14-1999	
		5,916,267		Tienboon	06-29-1999	
		5,888,223		Bray, Jr.	03-30-1999	

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		WO	00/62684	A1	NUVASIVE, INC.	10/26/2000		
				C2				
		WO	01/97721	A2	KYPHON INC.	12/27/2001		
		WO	01/97721	A3	KYPHON INC.	12/27/2001		
		WO	02/89712	A1	David Gerber et al.	11/14/2002		
		WO	03/20143	A2	SYNTHES	03/13/2003		
		WO	95/05783	A1	FAIRANT	03/02/1995		
		WO	96/00049	A1	FAIRANT	01/04/1996		
		WO	98/56301	A1	KYPHON, INC.	12/17/1998		
		WO	99/05995	A1	GORDON, NAYA, ROBERTS & THOMAS NUMBER 1	02/11/1999		

<b>Examiner Signature</b>	<b>Date Considered</b>
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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<p>Substitute for form 1449A/PTO</p> <h2 style="margin: 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="margin: 0;">(use as many sheets as necessary)</p>				<b>Complete if Known</b>	
<b>Application Number</b>		10/687,865			
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<b>Examiner Name</b>		Unknown			
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<b>Sheet</b>	3	<b>of</b>	9		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		5,171,279		Mathews	12-15-1992	
		5,129,900		Asher et al.	07-14-1992	
		5,092,893		Smith	03-03-1992	
		5,015,255		Kuslich	05-14-1991	
		4,955,908		Frey et al.	09-11-1990	
		4,892,545		Day et al.	01-09-1990	
		4,743,260		Burton	05-10-1988	
		4,653,481		Howland et al.	03-31-1987	
		4,599,086		Doty	07-08-1986	
		4,554,914		Kapp et al.	11-26-1985	
		4,479,491		Martin	10-30-1984	
		4,369,769		Edwards	01-25-1983	
		4,003,376		McKay et al.	01-18-1977	
		3,648,691		Lumb et al.	03-14-1972	
		3,426,364		Lumb	02-11-1969	
		2,677,369		Knowles	05-04-1954	
		2003/0040797	A1	Fallin et al.	02-27-2003	
		2003/0028250	A1	Reiley et al.	02-06-2003	
		2003/0004572	A1	Goble et al.	01-02-2003	
		2002/0151895	A1	Soboleski et al.	10-17-2002	

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

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			Filing Date	10/17/2003	
			First Named Inventor	E. Marlowe Goble et al.	
			Group Art Unit	3738	
			Examiner Name	Unknown	
Sheet	4	of	9	Attorney Docket Number	MED-1 CON CIP

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		Number	Kind Code <sup>2</sup> (if known)			
		3,867,728		Stubstad et al.	02-25-1975	
		3,875,595		Froning	04-08-1975	
		4,349,921		Kuntz	09-21-1982	
		4,759,769		Hedman et al.	07-26-1988	
		4,772,287		Ray et al.	09-20-1988	
		4,904,260		Ray et al.	02-27-1990	
		4,911,718		Lee et al.	03-27-1990	
		5,047,055		Bao et al.	09-10-1991	
		5,071,437		Steffee	12-10-1991	
		5,147,404		Downey	09-15-1992	
		5,171,280		Baugartner	12-15-1992	
		5,258,031		Salib et la.	11-02-1993	
		5,306,308		Gross et al.	04-26-1994	
		5,306,309		Wagner et al.	04-26-1994	
		5,370,697		Baumgartner	12-06-1994	
		5,437,672		Alleyne	08-01-1995	
		4,458,642		Beer et al.	10-17-1995	
		5,458,643		Oka et al.	10-17-1995	
		5,514,180		Heggeness et al.	05-07-1996	
		5,527,312		Ray	06-18-1996	

FOREIGN PATENT DOCUMENTS								
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	*	JP	10-179622	A2		07-07-1998		
	*	WO	00/38582	A1	NUVASIVE, INC.	07-06-2000		
	*	WO	98/48717	A1	TAYLOR, Jean et al.	11-05-1998		
	*	WO	99/23963	A1	DISMO	05-20-1999		
	*	WO	01/30248	A1	Reiley	05-03-2001		

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<b>Examiner Name</b>	Unknown				
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		Number	Kind Code <sup>2</sup> (if known)			
		5,534,028		Bao et al.	07-09-1996	
		5,534,030		Navarro et al.	07-09-1996	
		5,545,229		Parsons et al.	08-13-1996	
		5,556,431		Buttner-Janz	09-17-1996	
		5,571,189		Kuslich	11-05-1996	
		5,572,191		Lundberg	11-05-1996	
		5,645,597		Krapiva	07-08-1997	
		5,653,762		Pisharodi	08-05-1997	
		5,674,295		Ray et al.	10-07-1997	
		5,674,296		Bryan et al.	10-07-1997	
		5,676,701		Yuan et al.	10-14-1997	
		5,683,464		Wagner et al.	11-04-1997	
		5,702,450		Bisserie	12-30-1997	
		5,716,415		Steffee	02-10-1998	
		5,824,093		Ray et al.	10-20-1998	
		5,824,094		Serhan et al.	10-20-1998	
		5,865,846		Bryan et al.	02-02-1999	
		5,868,745		Alleyne	02-09-1999	
		5,893,889		Harrington	04-13-1999	
		6,001,130		Bryan et al.	12-14-1999	

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	*	GOH JC, ET AL., "Influence of PLIF cage size on lumbar spine stability", Spine, 2000 Jan 25:1, Medline abstract - one page.	
	*	HEAD WC, "Wagner surface replacement arthroplasty of the hip. Analysis of fourteen failures in forty-one hips", J Bone Joint Surg. [AM], 1981 Mar 63:3, Medline abstract - one page.	
	*	KHOO LT, ET AL., "A Biomechanical Analysis of the Effects of Lumbar Fusion on the Adjacent Vertebral Motion Segment",	
	*	Proceedings of the 2000 Annual Meeting of the North American Spine Society, New Orleans.	
	*	KOTANI Y, ET AL., "The effects of spinal fixation and destabilization on the biomechanical and histologic properties	
	*	of spinal ligaments. An in vivo study.", Spine, 1998 Mar 15 23:6, Medline abstract - one page.	
	*	LEMAIRE JP, ET AL., "Intervertebral Disc Prosthesis: Results and Prospects for the year 2000", Clinical Orthopaedics and	
	*	Related Research, Number 337, PP. 64-76.	

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		NAGATA H, ET AL., "The effects of immobilization of long segments of the spine on the adjacent and distal facet force	
		and lumbrosacral motion", Spine, 1993, Dec. 18:16, pp. 2471-2479	
		NIBU K, ET AL., "Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery [see	
		comments]", J Spinal Discord, 1997 Aug 10:4, Medline abstract - one page.	
		TSANTRIZOS A, ET AL., "Segmental stability and compressive strength of posterior lumbar interbody fusion implants",	
		Spine, 2000 Aug 1 25:15, Medline abstract - one page.	
		REILEY, M.A., U.S. Patent Application, Publication No. US2002/0123806A1, September 5, 2002.	

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